

Work Order ID 64150

PRELIMINARY ISSUE



Thursday, November 25, 2010 3:59:51 PM

Page 1

Item ID: D4298-020

Accept



Setup Start



Revision ID: PRELIM

Item Name: Knob

Stop



Start Date: 11/25/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 12/3/2010 Req'd Qty: 2.00



Customer:



Reference:

Approvals:

Process Plan:

R

Date: 10/11/24

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4298

PA1

100

0.00



Doosan

Memo

0.00

Doosan Lathe

SH 10/12/07

2 *✓*

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

SH 10/12/07

2 *✓*

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

- inspect to era
Dug - 020
Similar *(72)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 64150

Thursday, November 25, 2010 3:59:51 PM



Page 2

Item ID:	D4298-020	Accept		Setup	Start	
Revision ID:	PRELIM				Stop	
Item Name:	Knob					
Start Date:	11/25/2010	Start Qty: 2.00		Cust Item ID:		
Required Date:	12/3/2010	Req'd Qty: 2.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	Memo	0.00				2	BL	10-12-7.	
Hand Finishing									
140 	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3	0.00							
Powdercoat	Memo	0.00				2	BL	10-12-9.	
Powder Coating	Start time: 9:05 Oven temp: 350° Finish time: 9:35								
150 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

N/A
u

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 64150

Thursday, November 25, 2010 3:59:51 PM



Page 3

Item ID: D4298-020

Accept



Setup Start



Revision ID: PRELIM

Item Name: Knob

Stop



Start Date: 11/25/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 12/3/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



Packaging

Packaging

Identify as per dwg & Stock Location: BX

0.00

Memo

B 64166

0.00

SB

10/12/10

(2)

170



QC

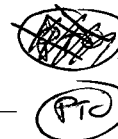
Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00



B/10-12-10
(2)

POSITIVE RECALL
EFFECTIVE 10.11.29 AUTH LA
RELEASED _____ DATE _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: / Date: 10.12.17

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.12.17	100	Upon Assembly of -001, the -020 knob diameter of 0.56 is too wide & interferes with A Rivet. RC: 3 part design.	<u>/</u> QS1012	A washer has been added to change the rivet & diameter has been revised to 0.50 for future production. See Rev. D dwg: E-mail attached	<u>N/A</u> <u>/</u>		<u>/</u> QS1012	<u>/</u> 10.12.17
10.12.17	100	Dwg Rev. D (ERA dwg) states A 0.060" depth, needs to be 0.60".	<u>/</u> QS1012	Advise ERA & have Rev D drawing corrected. Part is acceptable upon assembly & functions perfectly	<u>E</u> see e-mail attached.		<u>/</u> QS1012	<u>/</u> 10.12.17

NOTE: Date & initial all entries

Picklist Print

Page 1

Thursday, November 25, 2010 3:59:55 PM

Work Order ID: 64150

Parent Item: D4298-020

Parent Item Name: Knob



Start Date: 11/25/2010

Required Date: 12/3/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP revA 10.11.25 new issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6R0.750

Purchased

No

100

f

11.9648

0.08

0.168421



6061-T6 Round Bar .750"



SL 10/12/07

1
4/10.12.07

Location

Loc Qty

Loc Code

MAT

11.948

115469

0.0027

~~115869~~

11.9453

MAT012

0.016842105

112442

0.01684211

115809

22L

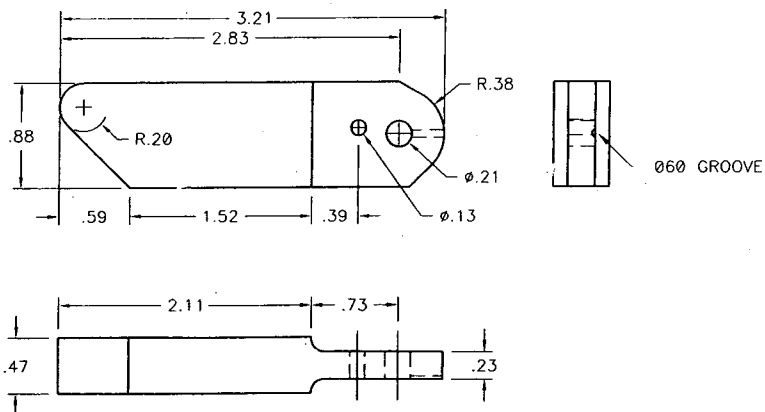
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

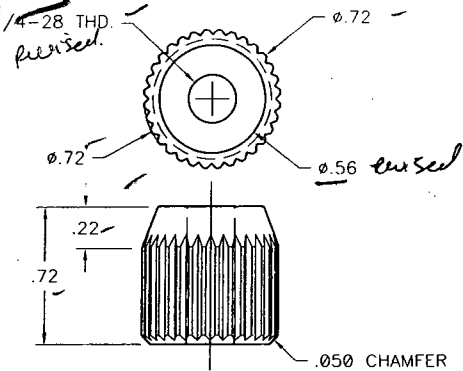
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

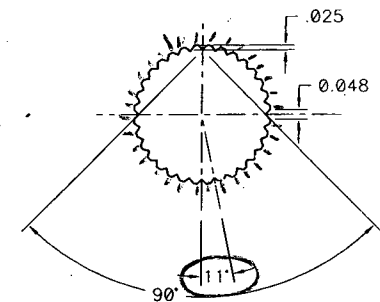


-018 MACHINED INNER

683



-020 KNOB

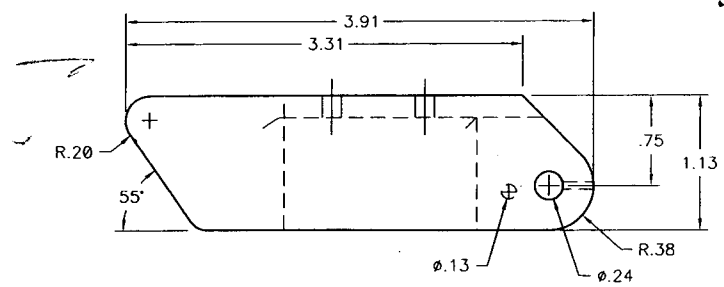


11.250

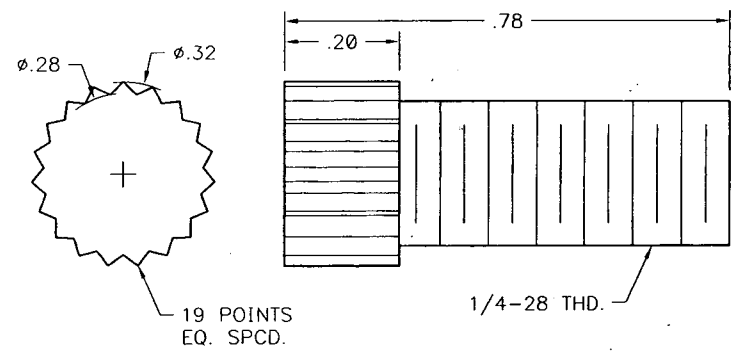
52.723

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 644150

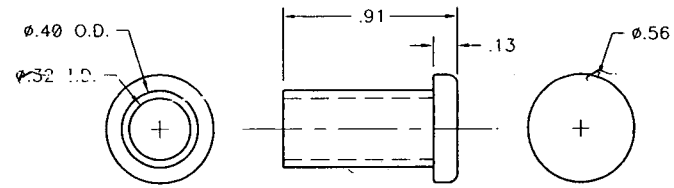
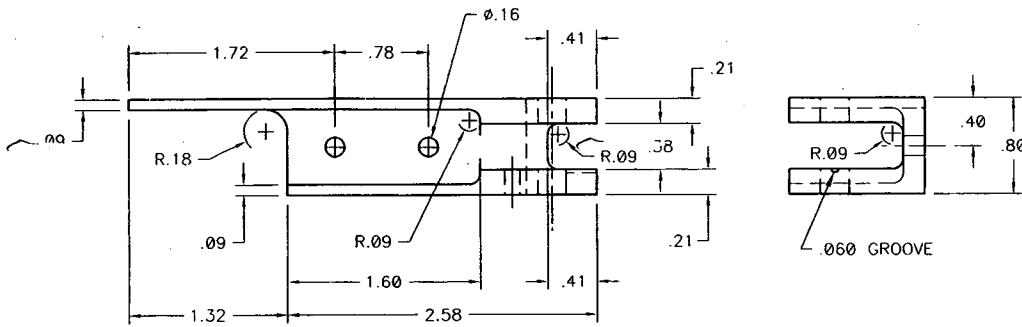
8/10-1126



-019 MACHINED OUTER



-021 MACHINED BOLT



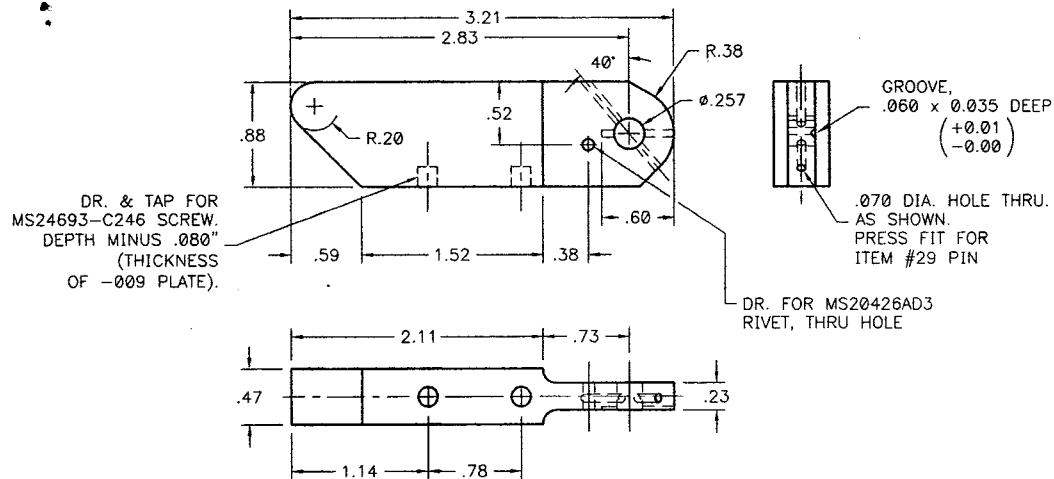
-022 PIN TOPPER

PROPRIETARY RIGHTS NOTICE

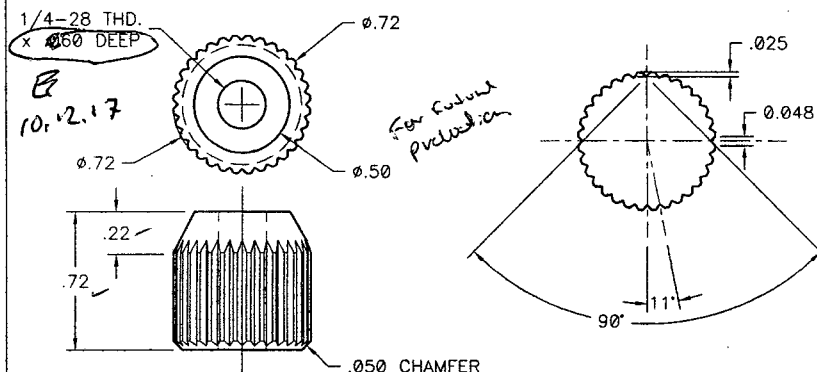
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Era Helicopters LLC

TITLE	SIZE	DWG. NO.	REV.
SINGLE PILOT VFR CHART HOLDER, AW139	C	13939-1-290 SHT 9 OF 10	A

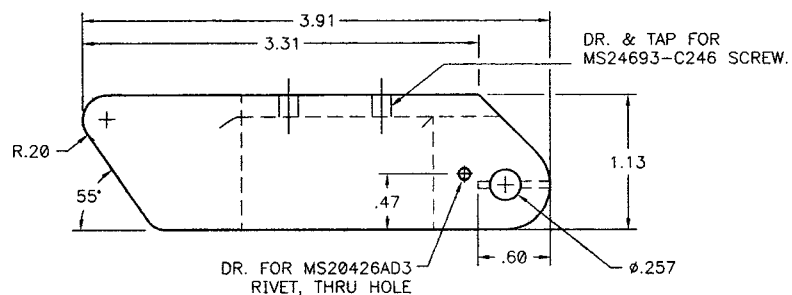


-018 MACHINED INNER

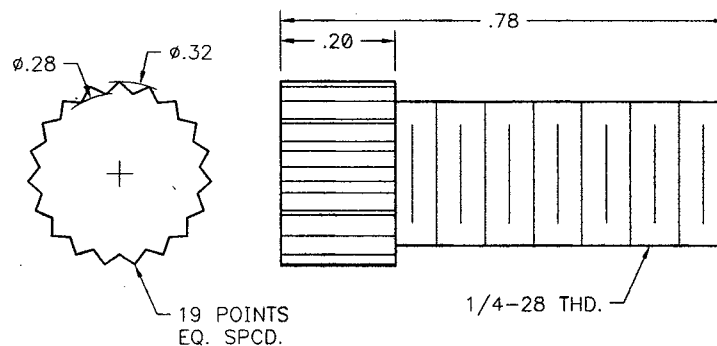


-020 KNOB

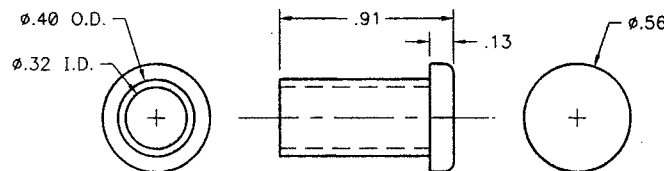
W/D 64150



-019 MACHINED OUTER



-021 MACHINED BOLT



-022 PIN TOPPER

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Era Helicopters LLC

TITLE	SIZE	DWG. NO.	REV.
SINGLE PILOT VFR CHART HOLDER, AW139	C	13939-1-290 SHT 9 OF 10	D

DART P/N	ERA P/N	Description
D4298-001	13939-1-290-001	CHART HOLDER ASSY
D4298-002	13939-1-290-002	PLATE SUB-ASSY
D4298-003	13939-1-290-003	PLATE SUB-ASSY
D4298-004	13939-1-290-004	FIXING BRACKET SUB-ASSY
D4298-005	13939-1-290-005	HINGE SUB-ASSY
D4298-006	13939-1-290-006	MACHINED INNER SUB-ASSY
D4298-007	13939-1-290-007	MACHINED OUTER SUB-ASSY
D4298-008	13939-1-290-008	PLATE
D4298-009	13939-1-290-009	PLATE
D4298-010	13939-1-290-010	FIXING BRACKET
D4298-011	13939-1-290-011	HINGE
D4298-012	13939-1-290-012	HINGE
D4298-013	13939-1-290-013	HINGE
D4298-014	13939-1-290-014	HINGE
D4298-015	13939-1-290-015	CLIP ANGLE
D4298-016	13939-1-290-016	CLIP STOP
D4298-017	13939-1-290-017	CLIP STOP MOUNT
D4298-018	13939-1-290-018	MACHINED INNER
D4298-019	13939-1-290-019	MACHINED OUTER
D4298-020	13939-1-290-020	KNOB
D4298-021	13939-1-290-021	MACHINE BOLT
D4298-022	13939-1-290-022	PIN TOPPER
D4298-023	13939-1-290-023	PIN
D4298-024	13939-1-290-024	SERRATED ADJUSTMENT WASHER

RELEASED
2010-12-15
W

A	NEW ISSUE	SC	10.12.15
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED	<i>W</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>W</i>	D4298	SHEET 1 OF 1
APPROVED	<i>W</i>	TITLE	SCALE
DE APPR.	<i>W</i>	CHART HOLDER (AW 139)	NTS
DATE	10.12.15	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Eric Charbonneau

From: Domingue, Elvin [edomingue@erahelicopters.com]
Sent: November 24, 2010 1:48 PM
To: Nelson, David; 'echarbonneau@dartaero.com'
Subject: Re: DXF files (AW139 Chart Holder)

Yes that would be perfect!

Elvin Domingue
Sent from my BlackBerry Wireless Device

From: Nelson, David
To: 'Eric Charbonneau' <echarbonneau@dartaero.com>
Cc: Domingue, Elvin
Sent: Wed Nov 24 12:37:04 2010
Subject: RE: DXF files (AW139 Chart Holder)
Eric,

That sounds okay to me, but I'll fwd to Elvin Domingue on this.

Elvin, does this finish sound okay for the AW139 Chart Holder?

Thanks,
David

From: Eric Charbonneau [<mailto:echarbonneau@dartaero.com>]
Sent: Wednesday, November 24, 2010 12:10 PM
To: Nelson, David
Subject: RE: DXF files

Thanks David, at the same time would you know what kind of finish is required on the assembly, most of our interior parts we alodine and then powder coat black sandtex, this black is satin and prevent any glare. If this is what you would like please let me know, or fwd this to whoever can help me out with this.

Thank,
Eric

From: Nelson, David [<mailto:dnelson@erahelicopters.com>]
Sent: November 24, 2010 11:53 AM
To: 'Eric Charbonneau'
Subject: RE: DXF files

Here you go.

Thanks,
David

From: Eric Charbonneau [<mailto:echarbonneau@dartaero.com>]
Sent: Wednesday, November 24, 2010 10:11 AM